**NASA-NOAA-NSF Climate Change Education Principal Investigators Meeting**
**April 17-20, 2012 *** Sheraton National Hotel, Arlington, Virginia**

# FEATURED PRESENTERS AND PANELISTS

**Kathy Berry Bertram** is the Education Director of the UAF Geophysical Institute. She has developed culturally responsive formal and informal education programs for indigenous students in Alaska, Hawaii, and elsewhere in the US for 22 years. In addition, she has developed an evidence-based framework for creating K-20 curricula and courses designed to increase indigenous student engagement and achievement in STEM. She has received funding for her research from a variety of federal and state agencies including NSF, NASA, USDOEd, and the Alaska Department of Education and Early Development. She has two decades of experience instructing graduate-level continuing education and/or professional development STEM courses and training workshops for K-20 educators across the nation. She received a Ph.D. in Science Education and Cross-Cultural Studies from the University of Alaska, Fairbanks in 2011.

**Jennifer L. Brennan** is the Outreach Lead for the NASA Earth Observing System Data and Information System (EOSDIS), where she focuses on increasing public awareness of NASA's Earth science data holdings, as well as communicating the value of these contributions through a variety of outreach venues. The primary objective of this outreach effort is to bridge the gap between data acquisition and applications by facilitating the discovery, accessibility, and usage of NASA Earth science data, services, and tools. Over the last decade, Jennifer has received two NASA Goddard Space Flight Center outreach awards for her team's outreach efforts: the NASA Code 400 Peer Award for outreach to the EOSDIS User Community in 2002 and a GSFC Excellence in Outreach Award for outstanding leadership in Earth science outreach in 2004. She received a Master of Business Administration in Marketing and International Business from the Kogod School of Business at American University in Washington, DC in 2000.

**Caroline Dilworth** is a Health Scientist Administrator in the Division of Extramural Research and Training at the National Institute of Environmental Health Sciences (NIEHS), where she co-directs the extramural environmental epidemiology program. She is responsible for developing a portfolio of grants focused on the impact of environmental exposures on human health, including male and female reproduction, pubertal maturation, cancer, adult cardiovascular and respiratory health, and general statistical methods of development and exposure assessments for population-based studies. She leads the NIEHS Human Health Impacts of Climate Change program and is the lead program administrator for the puberty studies of the NIEHS and NCI-funded Breast Cancer and the Environment Research Program. Prior to joining NIEHS in 2008, Dr. Dilworth completed a postdoctoral fellowship at the University of North Carolina (UNC), where her research focused primarily on the adverse effects of exposure to drinking water disinfection by-products (DBPs) on pregnancy health. She received a joint M.S.P.H. in Epidemiology and Environmental and Occupational Health from Emory University and a Ph.D. in Epidemiology from UNC.

**David Herring** is Director of Communications and Education at NOAA's Climate Program Office, where he has gained extensive experience writing and speaking about climate and Earth system science. He also serves as Program Manager of NOAA's Climate Web Portal and online ClimateWatch Magazine. Prior to his work at NOAA, David worked for 16 years in the Earth Sciences Division at NASA's Goddard Space Flight Center, where he served as Project Manager for Education and Outreach, team leader for NASA's Earth Observatory, and Outreach Coordinator of the Terra Mission. He received a master's degree in Science and Technical Communications from East Carolina University in Greenville, NC in 1992, where he was trained in journalism, science education, and science writing.

**Kathy Jacobs** is Assistant Director for Climate Assessment and Adaptation at the Office of Science and Technology Policy. She is the Director of the National Climate Assessment, a major effort to evaluate climate impacts on regions and sectors of the U.S. She is also part of a team working to develop a national adaptation strategy, and is the liaison to the Subcommittee on Water Availability and Quality within the National Science and Technology Council. Jacobs recently chaired a National Research Council panel on climate change adaptation within the America's Climate Choices Project, and has served on six other Academy committees. From 2006-2009, she was the Executive Director of the Arizona Water Institute, a consortium of the three state universities of Arizona focused on water-related research, education, and technology transfer in support of water supply sustainability. She has 23 years of experience as a water manager for the state of Arizona, including 14 years as director of the Tucson Active Management Area. Jacobs is currently on a mobility assignment from the University of Arizona, where she is on the faculty of the department of Soils, Water and Environmental Science. She received a master's degree in Environmental Planning from the University of California, Berkeley.

**Mark Z. Jacobson** is Director of the Atmosphere/Energy Program and Professor of Civil and Environmental Engineering at Stanford University. He is a Senior Fellow of the Woods Institute for the Environment and Senior Fellow of the Precourt Institute for Energy. His work involves the development and application of numerical models for understanding the effects of energy systems and vehicles on climate and air pollution. He has published two textbooks of two editions each and 120 peer-reviewed scientific journal articles. He received the 2005 American Meteorological Society Henry G. Houghton Award for "significant contributions to modeling aerosol chemistry and to understanding the role of soot and other carbon particles on climate." He co-authored a 2009 cover article in Scientific American with Dr. Mark DeLucchi of University of California, Davis on how to power the world with renewable energy (available here). In addition, Jacobson serves on the Energy Efficiency and Renewables Advisory Committee to the U.S. Secretary of Energy. He received a B.S. in Civil Engineering, an A.B. in Economics, and an M.S. in Environmental Engineering from

Stanford University in 1988, as well as an M.S. in Atmospheric Sciences in 1991 and a Ph.D. in Atmospheric Sciences in 1994 from the University of California, Los Angeles.

**James L. Kinter III** is Director of the Center for Ocean-Land-Atmosphere Studies (COLA) where he manages all aspects of basic and applied climate research conducted by the Center. Dr. Kinter's research includes studies of climate predictability on seasonal and longer time scales. He is especially interested in the prospects for prediction of El Niño and the extratropical response to tropical sea surface temperature anomalies using high-resolution coupled general circulation models of the Earth's atmosphere, oceans, and land surface. Dr. Kinter is a Professor in the Climate Dynamics Ph.D. Program of the College of Science at George Mason University. In addition, he has served as a National Research Council Associate at NASA Goddard Space Flight Center, as well as a faculty member of the University of Maryland, prior to joining COLA. He has served on many national advisory and review panels for scientific research programs and supercomputing programs for computational climate modeling. He received a doctoral degree in Geophysical Fluid Dynamics from Princeton University in 1984.

**Janet Kolodner** is a Regents' Professor of Interactive Computing at Georgia Institute of Technology and a Program Officer of the Cyberlearning: Transforming Education program at the National Science Foundation (NSF). She pioneered an approach called Case-Based Reasoning, as well as Learning by Design, an approach to middle school science education with foundations in the cognitive model suggested by case-based reasoning. Learning by Design provides the model for her published 3-year middle school science curriculum called Project-Based Inquiry Science (PBIS). Her most recent research addresses developing capabilities, dispositions toward action, and identity in the context of informal learning activities. Janet was the Founding Editor in Chief of the Journal of the Learning Sciences and held that position for 18 years. She was a co-founder of the International Society of the Learning Sciences and was its first Executive Officer. She received a Ph.D. in Computer Science from Yale University in 1980.

**Sabine Marx** is the Managing Director at the Center for Research on Environmental Decisions (CRED) at Columbia University. She joined CRED in 2005 after two years of post-doctoral work at the International Research Institute for Climate and Society (IRI) at Columbia's Earth Institute. Her work falls in the area of decision making under uncertainty; her research focuses on the use of climate information in agriculture, public health, and disaster preparedness and management. She is especially interested in the integration of climate science and social science, communication of climate information, and outreach to decision makers. At CRED, she is responsible for the coordination of over 20 research projects and for building synergy among the various projects. She received a Ph.D. in Medical History from

Carnegie Mellon University and a master's degree in Sociology and Pedagogy, with a minor in Psychology and Art Therapy, from the University of Cologne, Germany.

**Nancy Butler Songer** is a Professor of Science Education and Learning Technologies in the School of Education at the University of Michigan, as well as Director of the Center for Essential Science. Her research is focused on three areas: "re-purposing for learning" existing professional modeling, visualization and other computer-based resources utilized by professional scientists into powerful learning tools for students; addressing 4-10th grade urban students' underperformance in science through the design and evaluation of curricular units and emerging technologies focused on core content fused with science practices; and designing and evaluating assessments to measure complex learning in science. She was awarded a Presidential Faculty Fellowship from President William J. Clinton in 1996 and is a Fellow of the American Association for the Advancement of Science. She received a Ph.D. in Science Education from the University of California, Berkeley, an M.S. in Molecular/Developmental Biology from Tufts University, and a B.S. in Biological Sciences from the University of California, Davis.

**Courtney St. John** is the Climate Change Affairs Officer for the United States Navy's Task Force Climate Change, directed by the Oceanographer of the Navy. She oversees execution of the Navy's Climate Change Roadmap and Navy's adaptation to global climate change. Ms. St. John is the author of several articles about the Navy's climate change adaptation, including publications from Cambridge University Press, NATO, and *Naval War College Review.* She previously held a John A. Knauss Marine Policy Fellowship in the office of the Oceanographer of the Navy. She received a master's degree in City and Regional Planning, with a focus on environmental planning and policy, from Clemson University.